



CyberSeek expands cybersecurity workforce data coverage and enhances user experience

Cybersecurity job postings of 514,000 up over prior reporting period

DENVER, June 2, 2025 – Against a backdrop of uncertainty, employers across the economy continue to build their cybersecurity capacity through talent acquisition and skills development, according to new data from [CyberSeek™](#), the most comprehensive source of information on the U.S. cybersecurity workforce.

Employers in the private and public sectors deployed 514,359 job listings over the past 12 months¹ in recruiting for dedicated cybersecurity jobs and adjacent technical positions with a heavy cybersecurity skills requirement. This represents an increase of nearly 57,000 listings, or 12% over the lull in hiring activity during the prior 12-month reporting period.

The new CyberSeek data release and website refresh coincides with the [2025 NICE Conference & Expo](#), taking place in Denver. This year’s conference theme “Climbing Higher: Educating & Sustaining a Resilient Cybersecurity Workforce” reinforces the need for robust data and insights to inform strategic planning across private and public sector organizations.

“The cybersecurity workforce needs of organizations continue to climb higher and should compel us to scale and sustain education and workforce development programs,” said Rodney Petersen, director of NICE. “The CyberSeek data, based on actual job postings, also reinforces the importance of employers providing realistic entry-level opportunities for aspiring cybersecurity workers and prioritizing the ongoing development of talent.”

One of the new data additions to CyberSeek is the percent of cybersecurity job listings that cite an artificial intelligence (AI) skills requirement. Over the past 12 months, approximately 10% of employers recruiting for cybersecurity positions cited AI as a

¹ 12-month period spanning May 2024 through April 2025

requirement. For other segments of employers, it may be an implied skill requirement not explicitly mentioned in the job listing.

For the first time CyberSeek is providing a global cybersecurity employment baseline, which stands at an estimated 4,970,000, with a range estimate of 4.4m to 5.5m using lower-end and higher-end estimation factors. This figure encompasses dedicated cybersecurity professionals and adjacent IT professionals with significant cybersecurity responsibilities.

"Despite broader economic uncertainty, demand for cybersecurity talent remains high, with a workforce gap continuing to challenge both the public and private sectors," said Matthew Walsh, Research Director at Lightcast. "In this update to CyberSeek, Lightcast and CompTIA are proud to introduce a global estimate of the cybersecurity workforce, along with new insights on the growing intersection of cybersecurity and AI skills. These data provide valuable insights for employers, policymakers, educators, and jobseekers navigating today's evolving cybersecurity landscape."

Other new data enhancements include an updated mapping of employer job postings to the [NICE Workforce Framework for Cybersecurity](#).

Job postings²	NICE Workforce Framework for Cybersecurity Categories
355,590	Oversight and Governance (OG)
335,993	Implementation and Operation (IO)
331,644	Design and Development (DD)
238,516	Protection and Defense (PD)
19,525	Investigation (IN)

The CyberSeek-calculated supply-demand ratio is 74%, suggesting a larger gap between perceived employer cybersecurity staffing needs and the potential supply of talent. Other factors adding complexity to the dynamic include recruiting periods that are 21% longer on average, the emergence of yet-to-be-defined AI-enabled threats, the pace of technical and process change, and the ever-present challenges of continuous learning and skills development.

² 12-month period spanning May 2024 through April 2025 | Some overlap in categories may exist

“The data reinforces the importance of a layered approach to cybersecurity defense strategies,” said Tim Herbert, chief research officer, CompTIA. “This is especially critical in the emerging domains of AI (SecAI) and operational technology security (SecOT) where new security protocols and skills will be needed.”

The latest CyberSeek release again shows cybersecurity talent needs spanning the country. Businesses of all sizes and every industry sector type, as well as state and local governments, must contend with decisions of building their cybersecurity teams through recruitment or internal development. The top 10 states account for approximately 55% of hiring activity via job posting volumes, with the remaining 45% among every other state.

State	Job postings
Virginia	53,855
California	44,344
Texas	42,559
Maryland	27,050
Florida	23,792

CyberSeek provides detailed, actionable data about the cybersecurity job market. It is a joint initiative of NICE, a program of the National Institute of Standards and Technology focused on advancing cybersecurity education and workforce development; Lightcast, a leading authority on global job skills, workforce talent and labor market dynamics; and CompTIA, the world’s leading information technology (IT) certification and training body. Visit <https://www.cyberseek.org/> to learn more.

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